

To: Herrera, Angeles[Herrera.Angeles@epa.gov]
Cc: Ball, Harold[Ball.Harold@epa.gov]; Gene Seidlitz (gseidlitz@blm.gov)[gseidlitz@blm.gov]; Amme, Brian[bamme@blm.gov]
From: Greg Lovato
Sent: Sat 2/18/2017 7:30:58 PM
Subject: RE: groundwater comment on Anaconda Framework

I still have some simple questions,

- 1) how is the FS going to be successful in analyzing the contamination that has already migrated off-property until we have better information about how successful source control actually performs?
- 2) won't implementation of source control sooner rather than later result in reducing the scope and cost of the final remedy?

I also don't see anything in CERCLA or EPA guidance that requires that a full FS for all of groundwater prior to selection and implementation of a source control remedy.

What I am seeing here is a preference from EPA but not something that is practical or required by CERCLA.

That being said I will circle back with NDEP folks and respond as soon as possible.

Greg

From: Herrera, Angeles [Herrera.Angeles@epa.gov]
Sent: Friday, February 17, 2017 2:48 PM
To: Greg Lovato
Cc: Ball, Harold; Gene Seidlitz (gseidlitz@blm.gov); Amme, Brian
Subject: RE: groundwater comment on Anaconda Framework

Greg,

EPA agrees that a phased approach to groundwater cleanup may be appropriate if that is the preferred alternative that results from a comprehensive OU1 Groundwater Feasibility Study (FS). However, EPA wants to make sure that EPA, NDEP, BLM, and ARC are all on the same page with respect to what is necessary to select a CERCLA protective remedy. It would not be in anyone's interest for ARC and NDEP to propose a groundwater remedy in 2019 or 2020 that EPA and BLM are not comfortable deferring to. Thus, it is essential that we have a common understanding now as to what is necessary.

The OU1 FS needs to evaluate the entire plume to select a CERCLA protective remedy. The data collection for the Remedial Investigation (RI) for the entire plume is complete and the final RI Report will allow a thorough analysis of alternatives. The FS must include alternatives that restore groundwater to protect its beneficial uses. It is necessary to evaluate the entire groundwater plume because the contamination has already migrated from the mine property and under the neighboring community, contaminating existing drinking water wells and threatening downgradient receptors including the Tribes and agricultural interests.

Although CERCLA permits remedies to be implemented in phases; there is no reason to delay evaluation of off-property groundwater at this Site. The best case scenario for the source control portion of the remedy is that it will prevent additional contamination from migrating off-property and will slow the migration of the plume into un-impacted areas. However, even if the FS assumes the best case scenario, it is still necessary to evaluate how and when to address the contamination that has already migrated off-property.

Based on our experience at other groundwater sites, delays in capturing and treating contaminants could increase the scope and cost of the final remedy.

To be protective the FS must consider alternatives that will allow restoration of the impacted plume within a reasonable timeframe, particularly the off-property portion. The FS could evaluate multiple scenarios for the off-property groundwater, including monitored and natural attenuation (MNA), pump and treat, and containment. However, restoration of the off-property plume must be a remedial action objective (RAO) evaluated in the FS. The FS could also evaluate whether it is technically impracticable to restore the aquifer.

A comprehensive FS will also provide the necessary information to the impacted communities, Tribes, and agricultural interests as to how the proposed remedy will protect them. By agreeing to do a comprehensive FS; NDEP, EPA, and BLM will be able to consult with the Tribes, community, and other stakeholders to explain how deferral will address their concerns and make sure that a CERCLA protective remedy is implemented at the Site.

To conclude, we believe it is in everyone's interest to do a comprehensive FS for groundwater to address the concerns of all of the stakeholders and evaluate a range of options to deal with the on and off-property groundwater.

Thanks,
Angeles

-----Original Message-----

From: Greg Lovato [mailto:glovato@ndep.nv.gov]
Sent: Friday, January 27, 2017 10:34 AM
To: Herrera, Angeles <Herrera.Angeles@epa.gov>
Cc: Ball, Harold <Ball.Harold@epa.gov>; Gene Seidlitz (gseidlitz@blm.gov) <gseidlitz@blm.gov>
Subject: RE: groundwater comment on Anaconda Framework

Angeles,

Thank you for providing the description of EPA concerns associated with groundwater remedy selection Framework Agreement.

NDEP considers the implementation of on-site source control and groundwater remedy a priority and critical to the evaluation and selection of a final site-wide groundwater remedy. In an effort to address EPA's concern about the "off-site" portion of the plume where "the direct exposure to site contaminants would occur/is occurring" while the on-site FS remedy is implemented and monitored, we suggest adding an Interim Measures section in the Framework Agreement and Interim AOC that includes measures to monitor, and contain migration of mine-impacted groundwater, if NDEP determines necessary, to address exposure concerns. The concept for the remediation plan is to sequence a CERCLA protective process to evaluate, select, and implement a site-wide remedy.

We look forward to continuing this discussion with you all next week.

Greg

-----Original Message-----

From: Herrera, Angeles [mailto:Herrera.Angeles@epa.gov]
Sent: Thursday, December 22, 2016 2:46 PM
To: Greg Lovato
Cc: Ball, Harold; Gene Seidlitz (gseidlitz@blm.gov)
Subject: groundwater comment on Anaconda Framework

Greg,

As I mentioned, we have some concerns regarding the language I excerpt below. The document appears to propose that no "offsite" FS is contemplated until after the "onsite" FS and remedy is implemented. If so, this approach would not be consistent with CERCLA process and is problematic on many levels since it would require adoption of a remedy that is not protective site wide - we would not be addressing the "offsite" portion of the plume where the direct exposure to site contaminants would occur / is occurring. As I mentioned, in a deferral agreement, we are looking for is a "soup to nuts" CERCLA equivalent process to evaluate, select, and implement a site-wide remedy. Let me know if you would like to discuss further. Thanks. Angeles

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ARC - NDEP Draft Framework for Agreement (October 21, 2016)

III. c. vi. a.

ARC will first complete a feasibility study, including a human health risk assessment, for on-site groundwater (p. 9)

III. c. vi. e.

NDEP will not commence remedy selection and remedy implementation for off-site groundwater until after completion of the on-site groundwater remedy performance evaluation period. At that time, ARC will complete a feasibility study, including human health risk assessment, for off-site groundwater (p.10)

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